

Abstract

A data-driven, hierarchical information search and navigation system and method enable search and navigation of sets of documents or other materials by certain common attributes that characterize the materials. The invention includes several aspects of a data-driven, hierarchical search and navigation system that employs this search and navigation mode. The search and navigation system of the present invention includes features of an navigation interface, a search interface, a knowledge base and a taxonomy definition process and a classification process for generating the knowledge base, a graph-based navigable data structure and method for generating the data structure, World Wide Web-based applications of the system, and methods of implementing the system. Users are able to search or browse a particular collection of documents by selecting desired values for the attributes or by searching the attribute-value pairs. A data-driven, hierarchical information search and navigation system and method enable this navigation mode by associating terms with the materials, defining a set of hierarchical relationships among the terms, providing a guided navigation mechanism based on the relationship between the terms, and providing a search mechanism that can respond to free-text queries with single-term or multi-term interpretations. In another aspect of the invention, implementations of the invention may be scalable through parallel or distributed computation.